

ABSTRACT

Disclosed is a block copolymer comprising at least two S polymer blocks comprising vinyl aromatic hydrocarbon monomer units, and one B polymer block or two or more B polymer blocks which contains or collectively contain isoprene monomer units and 1,3-butadiene monomer units, wherein the amount of the vinyl aromatic hydrocarbon monomer units and the total amount of the isoprene monomer units and the 1,3-butadiene monomer units are, respectively, from 60 to 95 % by weight and from 40 to 5 % by weight, each based on the weight of the copolymer, wherein the isoprene monomer unit/1,3-butadiene monomer unit weight ratio is from 45/55 to 97/3, and wherein the vinyl aromatic hydrocarbon monomer unit moiety of the copolymer has a short segment ratio of from 0 to 30 % by weight, which is defined as the weight percentage, based on the total weight of vinyl aromatic hydrocarbon monomer units in the copolymer, of the vinyl aromatic hydrocarbon monomer units in at least one short segment consisting of 1 to 3 vinyl aromatic hydrocarbon monomer units.